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Editorials and Annotations

Editorial: Harm Reduction—A Framework for Incorporating Science into Drug Policy

The articles on addictive substances in this issue of the Journal provide additional information on both the adverse health consequences of the nonmedical use of psychoactive drugs and the ways in which such consequences might be reduced. It is now abundantly clear that the nonmedical use of psychoactive drugs is one of the major causes of health problems in the United States, as reflected in the physiological effects of the drugs (overdoses and alcohol cirrhosis), behavior while under the influence of drugs (drunken driving and domestic violence), and consequences inherent in drug administration (carcinogens in tobacco smoke, human immunodeficiency virus [HIV] and other serious infections transmitted through shared injection equipment). Additional health problems arise when criminal laws are used to suppress psychoactive drug use. The recent increases in homicide among US youth¹ may be a result of the increased availability of firearms associated with the illegal distribution of crack cocaine.

That the United States has enormous health problems associated with the nonmedical use of psychoactive drugs is not surprising. Over the centuries, and particularly during the first quarter of the 20th century,²⁻⁴ our laws and social customs for regulating this practice incorporated many fundamental scientific errors, such as (1) bad pharmacology—that marijuana is an addictive narcotic and that tobacco does not contain a drug; (2) bad psychology—that repetitive drug use can always be controlled through intentional behaviors; (3) bad sociology—that the drugs used by foreigners and minority groups are the bad drugs, and that criminal laws can effectively reduce psychoactive drug use at a low cost to society;

and (4) bad economics—that the increased “cost of business” for selling an illegal product will outweigh the increased profits to be made from selling through illegal markets.

The point is not to identify the scientific mistakes in our present system for regulating nonmedical psychoactive drug use, but to develop a new system that is consistent with present scientific knowledge and able to incorporate new scientific findings. If the United States is to reduce the adverse health consequences of such drug use, we will probably need an explicit *public health* perspective on it. Spurred by the urgency of the HIV epidemic among injection drug users, groups in Europe and Australia have been developing just such a perspective, using the terms “harm reduction” and “harm minimization” to describe it.⁵⁻⁸

It must be emphasized that the harm reduction perspective is still under active development, and there is as yet no consensus on its fundamentals. Nevertheless, the following may be considered a current working list of its basic components:

1. Nonmedical use of psychoactive drugs is inevitable in any society that has access to such drugs. Drug policies cannot be based on a utopian belief that nonmedical drug use will be eliminated.

2. Nonmedical drug use will inevitably produce important social and individual harm. Drug policies cannot be based on a utopian belief that all drug users will always use drugs safely.

3. Drug policies must be pragmatic. They must be assessed on their actual consequences, not on whether they symbolically send the right, the wrong, or mixed messages.

4. Drug users are an integral part of the larger community. Protecting the health of the community as a whole therefore requires protecting the health of drug users, and this requires integrating the drug users within the community rather than attempting to isolate them from it.

5. Drug use leads to individual and social harms through many different mechanisms, so a wide range of interventions is needed to address these harms. These interventions include providing health care (including drug abuse treatment) to current drug users; reducing the numbers of persons who are likely to begin using some drugs; and, particularly, enabling users to switch to safer forms of drug use. It is not always necessary to reduce nonmedical drug use in order to reduce harms.

The harm reduction perspective thus would be particularly amenable to using research findings. *Indeed, within this perspective, failure to monitor the outcomes of nonmedical drug use and failure to use research findings would violate the core value of a realistic pragmatism.* The harm reduction perspective emphasizes the need to base policy on research rather than on stereotypes of (legal and illegal) drug users.

One of the most common criticisms of harm reduction programs (such as syringe exchanges) is that they would be a first step on the slippery slope toward legalization of currently illegal drugs. It is critical to understand the differences between a public health harm reduction perspective and a libertarian "everyone has the right to take whatever drugs he or she desires" perspective. Within the harm reduction perspective, individual rights are important and their loss is a harm to be avoided. At the same time, government and public health authorities have a definite responsibility for formulating policies to reduce the health and social harm associated with the nonmedical use of psychoactive drugs, and civil and criminal laws are seen as potent tools toward this end. A harm reduction perspective does, however, call attention to the possible adverse health and social consequences of relying on criminal laws and stigmatizing drug users as methods for reducing nonmedical drug use.

The value of harm reduction policies should be assessed against their actual effects on drug-related harms rather than on their consistency with cultural traditions. Accordingly, there are three imme-

diated tasks for harm reduction in the United States:

1. Providing adequate treatment for persons with psychoactive drug use problems. This should include problems with both legal and illegal drugs, and short- and long-term types of treatment. A combination of public funding and private health insurance may be needed to provide an adequate treatment system.

2. Reducing the transmission of HIV associated with illicit drug use. Recent estimates indicate that drug injection-related HIV transmission has become the most common type of new HIV infection in the country.⁹ Harm reduction strategies, including treatment on demand and legal access to sterile injection equipment,¹⁰ need to be implemented nationally.¹¹

3. Developing new regulatory formats for distributing drugs for some nonmedical use. New formats are needed in which adults have inconvenient and expensive but noncriminal access to some drugs. The drug preparations should be formulated to reduce the likelihood of dependency and of immediate behavioral impairment. Commercial advertising for the drugs should be severely restricted and countered by realistic countercommercials.

The goal of such new regulatory formats can be stated in economic terms: to reduce the profit potential in selling products for nonmedical drug use. This economic goal is in sharp contrast to the present system, in which legal drugs are sold to tens of millions of persons at moderate profit margins and illegal drugs are sold to millions of persons at enormous profit margins. Tobacco/nicotine is an obvious example of nonmedical drug use where such a new regulatory approach is needed.

Success on any of these three tasks would greatly enhance the political credibility of the harm reduction perspective and provide legitimacy for trying other harm reduction programs.

On a longer term basis, it will also be important to create a health-oriented research and development program for nonmedical psychoactive drug use. If one accepts that people in the United States and elsewhere will continue using such drugs, it is obvious that current botanical, chemical, and neuroscience methods should be able to produce safer products than those currently available, both licit and illicit. Less harmful drug use could be based on new drugs, new methods of administration for current drugs (such as

nicotine inhalers, which would not produce carcinogenic smoke), and new social customs to reduce drug-related harm (such as designated driver programs and injection without sharing the injection equipment).

As better drug products and new social customs are developed, it will be important that the legal and regulatory restrictions placed upon them do not prevent them from replacing the more harmful products and customs.

Developing public support for a harm reduction public health perspective on nonmedical drug use will not be easy. There are strong emotional commitments to cultural traditions that demonize selected psychoactive drugs. There are multibillion-dollar vested economic interests in the status quo arrangements for selling both legal and illegal drugs. While the health and criminal justice problems associated with the present "unrestricted marketing of legal drugs/war on illegal drugs" policies are rather obvious, many political leaders have responded by calling for the intensification of present policies rather than for the development of new policies. Herbert Kleber has called this the "needing ever more king's horses and men to put Humpty together again" reaction (personal communication, October 1994).

But there are also optimistic signs. There is a growing recognition that at least some of the adverse consequences of nonmedical drug use (e.g., HIV transmission) can be reduced without increasing drug use. There is also a growing recognition that current legal status is not commensurate with the addiction liability and health consequences of some drugs (e.g., nicotine in tobacco).

There are also developments—the increased role of drug injection in HIV transmission,⁹ the recent increase in marijuana and LSD use among youth,¹² the potential banning of tobacco by the Food and Drug Administration, the cost of incarcerating illicit drug users—that may force a reexamination of policies toward nonmedical drug use. Public health officials need to articulate and promote harm reduction policies that can incorporate scientific research into programs to reduce the health and social problems associated with nonmedical drug use. □

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Editorial: The Natural History of Substance Use as a Guide to Setting Drug Policy

In 1914 the United States began outlawing psychoactive drugs or adding them to a list of controlled substances that could be dispensed only by prescription from a specially licensed physician. This list of controlled substances has grown substantially over time. The only opposing trend was the repeal of the prohibition of alcohol in 1933. Today alcohol, tobacco, and caffeine are the only substances widely recognized as psychoactive that remain available without a doctor's prescription. Caffeine is the only one entirely unregulated, perhaps because it does not endanger society by causing intoxication and has not been shown to cause physical damage to initially healthy persons. Alcohol and tobacco are legal only for persons older than specified ages, although most youngsters experiment with them well before they are legally permitted to do so. Yet these two legal drugs have been shown more definitively to have long-term serious health consequences for users and for offspring exposed to them in utero¹ than the banned or controlled substances.

At this odd moment in history, the Food and Drug Administration is considering banning the sale of tobacco entirely, while smokers argue that smoking is a civil right. At the same time, members of the law enforcement community and political conservatives, who only a few years ago were urging stricter laws and longer sentences to curb the use and sale of illicit and controlled drugs, are now divided. Some supported a crime bill that gave indefinite sentences to "three-time losers" whose crimes were drug related, while others are seriously considering recommending the legalization of drugs in

response to unrelenting street crime and bulging prisons. They cite the nation's experience with the prohibition of alcohol as evidence for the criminogenic effects of attempts to curb use by confiscating supplies and punishing sellers. At the same time, the chorus of youths arguing for legalization of marijuana in the 1970s has been stilled, perhaps because marijuana is no longer a political symbol but perhaps also because they learned, as researchers did, that the choice was never really marijuana instead of alcohol and tobacco, as the early rhetoric proposed, but rather marijuana in addition to alcohol and tobacco.

It is time to see whether empirical data can make policy choices more rational. Today the first generation to be thoroughly exposed to the drug epidemic that began in the late 1960s and peaked in the 1970s has passed through early adulthood and can provide data that might guide our choice among these contrary recommendations. The article by Chen and Kandel in this issue² adds a new chapter to their study, extending to age 34 or 35 the natural history of use of both legal and illegal drugs. Their study began in 1971 with New York high school students of 15 and 16, just the ages at which drug experimentation typically got started early in the epidemic. At the most recent follow-up in 1990, most of these subjects had left school, married, and were engaged in careers. Earlier chapters in their history appeared in this journal in 1976, 1984, and 1987.^{3–5} Like any study of a single birth cohort, this study may not forecast the future of later cohorts living in other places. But in the current article

the authors show their data to be compatible with national surveys covering broader age ranges,^{6,7} reassuring us that their findings are probably generalizable.

This study provides a natural history of the use of both legally and illicitly used drugs. (There are also data about drugs used by prescription and prescribable drugs used without a prescription, but these data are less complete and not relevant to the current debate.) Within the legal category there are alcohol and tobacco; among the illicit drugs, marijuana and cocaine provide sufficient numbers of users. Being able to see how histories of use differ within as well as across legal statuses allows us to consider whether a change in legal status is likely to have a large effect independent of the unique chemical composition of the substance.

We deduce from these results that some things would probably not change with a change in drugs' legal status. Whether tobacco is outlawed or illicit drugs are legalized, the chief initiators and heaviest users will be adolescents and young adults. Essentially no psychoactive drug use (other than use of drugs prescribed by physicians) begins after age 20, and maximum use of both legal and illicit drugs occurs in the early 20s.

However, other changes can be expected. Legal drugs are used by many more persons than are illicit drugs. Thus legalizing marijuana and cocaine, the most popular illicit drugs, might make them as commonly used as tobacco and

Editor's Note. See related article by Chen and Kandel (p 41) in this issue.